

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for characterizing a nucleic acid-protein interaction comprising:
  - (a) immobilizing a nucleic acid or a protein within a solid support;
  - (b) contacting the immobilized nucleic acid with a protein in aqueous solution ~~or and contacting the immobilized protein with a nucleic acid in aqueous solution~~ under conditions which allow the immobilized nucleic acid and the protein or the immobilized protein and the nucleic acid to interact; and
  - (c) measuring the strength of the nucleic acid-protein interaction, if any.
2. (Original) The method of claim 1 further comprising repeating steps (a) through (c) one or more times.
3. (Original) The method of claim 2 wherein the nucleic acid, protein or both used in repeated steps (a) through (c) are different from the respective nucleic acid, protein or both used in the first iteration.
4. (Original) The method of claim 1 wherein the nucleic acid is selected from the group consisting of ss RNA, ds RNA, ss DNA, ds DNA and PNA.
5. (Original) The method of claim 1 wherein the solid support is a gel pad.
6. (Original) The method of claim 1 wherein the strength of the nucleic acid-protein interaction is measured through  $T_m$  or a change in  $T_m$ .

7. (Original) The method of claim 1 wherein the strength of the nucleic acid-protein interaction is measured through fluorescence or a change in fluorescence.

8. (Currently Amended) The method of claim 1 wherein the immobilized nucleic acid sequence and nucleic acid sequence in aqueous solution ~~is-are~~ selected from the group consisting of a nucleic acid having a predetermined sequence and nucleic acid not having a predetermined sequence.

9. (Currently Amended) The method of claim 1 wherein the immobilized protein and protein in aqueous solution ~~is-are~~ selected from the group of proteins consisting of a predetermined protein and a protein which is not predetermined.

10. (Original) The method of claim 8 wherein the nucleic acid does not have a predetermined sequence further comprising determining the sequence of the nucleic acid.

11. (Original) The method of claim 9 wherein the protein is not predetermined further comprising determining the identity of the protein.

12. (Original) The method of claim 1 wherein the nucleic acid sequence is a nucleic acid encoding a functional nucleic acid sequence.

13. (Original) The method of claim 12 wherein the functional nucleic acid sequence is a promoter or gene.

14. (Original) The method of claim 1 wherein the protein modulates the activity or expression of a gene or gene product.

15. (Original) A kit for characterizing nucleic acid-protein interactions comprising instructions for carrying out the method of claim 1.

16. (Original) The kit of claim 15 further comprising one or more of a solid support, buffer, dyes or disposable lab equipment.

17 - 23. Cancelled.